1 ATG

2 AAG

3 AAA

4 ATC

5 TTT

6 GTT

7 AGC

8 TTT

9 ACT Cutting this part out because it codes for a trans-membrane helix (refer to TMPRED results)

10 CTG

11 CTC

12 TTC

13 TTC

14 CTG

15 ATT

16 CCG

17 GTG

18 GGT

TACTCTTCTAAGCTGATCTTCGTGTCTATGATCACCCGTCACGGCGATCGTGCGCCGTTTGCGAACATCGAAAACGCGAACTACTCTTGGGGTACCGAACTGTCTGAGCTGACCCCAATCGGTATGAACCAGGAATACAATCTGGGTCTCCAGCTGCGTAAACGTTACATCGACAAATTCGGTCTGCTGCCGGAGCACTACGTTGACCAATCTATCTACGTCCTGTCTTCTCACACGAATCGTACCGTTGTTTCTGCGCAATCTCTGCTGATGGGTCTGTACCCAGCGGGTACGGGTCCGCTGATCGGTGACGGCGACCCGGCAATCAAAGACCGTTTCCAGCCGATCCCGATCATGACCCTGTCTGCGGACTCTCGTCTGATCCAGTTCCCGTACGAACAGTACCTGGCGGTTCTGAAAAAGTACGTGTACAACAGCCCGGAGTGGCAAAACAAAACCAAAGAAGCGGCTCCGAACTTTGCCAAATGGCAGCAAATCCTGGGTAATCGTATCTCTGGTCTGAACGACGTCATCACCGTTGGTGACGTTCTGATCGTGGCCCAGGCGCATGGCAAGCCGCTGCCGAAAGGTCTGTCTCAAGAAGACGCGGACCAGATCATCGCGCTGACCGACTGGGGTCTGGCGCAGCAGTTCAAATCTCAGAAAGTTTCTTACATCATGGGTGGTAAACTGACCAACCGTATGATCGAAGACCTCAACAACGCGGTTAATGGTAAATCTAAATACAAAATGACCTACTACTCCGGTCACGACCTCACCCTGCTCGAAGTTATGGGTACTCTGGGTGTTCCGCTGGACACCGCCCCAGGTTACGCGAGCAACCTGGAAATGGAACTGTACAAGGATGGTGACATCTACACCGTTAAACTGCGTTACAACGGCAAGTATGTGAAACTGCCTATCATGGACAAAAACAACTCTTGCTCTCTGGACGCTCTGAACAAATACATGCAGTCTATCAACGAAAAATTCCAGAAATAA

**OLD PRIMER:** TACTTCCAATCCATGAAGAAAATCTTTGTTAG

**NEW PRIMER:** TACTTCCAATCCATGGTGGGTTACTCTTCT

Forward Primer:

5’ TACTTCCAATCCATGGTGGGTTACTCTTCT 3’ 30 bp

GC Content 43.3%

0 mM Mg2+ Tm 60.9 oC 1.5 mM Mg2+ Tm 68.2 oC 2 mM Mg2+ Tm 68.7 oC

4 mM Mg2+ Tm 69.8 oC 6 mM Mg2+ Tm 70.3 oC

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**SAME REVERSE PRIMER:** TATCCACCTTTACTGTTATTTCTGGAATTTTTCG

Reverse Primer:

5’ TATCCACCTTTACTGTTATTTCTGGAATTTTTCG 3’

**Reverse complement it:**

5’ CGAAAAATTCCAGAAATAACAGTAAAGGTGGATA 3’ 34 bp

GC Content 32.4%

0 mM Mg2+ Tm 57.8 oC 1.5 mM Mg2+ Tm 65.9 oC 2 mM Mg2+ Tm 66.4 oC

4 mM Mg2+ Tm 67.6 oC 6 mM Mg2+ Tm 68.1 oC

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